Proceedings of the 14th Regular Meeting of the Pacific Coast Entomological Soc.

The 14th Regular Quarterly meeting of the Pacific Coast Ent. Society was held on Nov. 26th, 1904, at the Café Odeon, 8 O'Farrell St.

President Fuchs in the chair.

Minutes of the preceding meeting were read and approved.

15 members responded to roll call as follows:—

Pres. Chas. Fuchs.	L. E. Rickseecker.
F. W. Nunenmacher.	Leon Munier.
Miss Bertha Chapman.	Edw. Ehrhorn.
J. E. Cottle.	F. E. Blaisdell.
J. G. Grundel.	J. C. Huguenin.
Miss Julia Wright.	F. X. Williams.
E. K. Carnes.	Miss Alice Eastwood.
Fordyce Grinnell.	

The following guests were present:— Mrs. F. E. Blaisdell, Mrs. J. C. Huguenin, + Mrs. Chas. Fuchs.

The Treasurer then read the following report:—

Mr. President:—

The following is the Treasurer's Report for the Quarter just ended:—

Bal. in Treasury at last meeting	$3.70
Dues received at + since last Meeting	8.00
Expenses since last meeting	$7.25
Money Received from Mr. Reichy	5.25
Bal. in Treasury	$9.70

The following names were proposed for membership:- J. H. Thompson and C. V. Burke, proposed by F. X. Williams & seconded by F. E. Blaisdell. They were unanimously elected.

Mr. J. J. Grundel read a paper on the "Life History of Lemonias virgulti.

Miss Julia Wright followed with a report of a "Trip Abroad."

Mr. F. X. Williams read a paper titled "Notes on the Larvae of certain Lepidoptera."

Dr. F. E. Blaisdell reported taking 96 specimens of Aphodius rubratus on Nov. 24th in the Alhambra Valley, Contra Costa Co., Calif., from the form of a wood-rats nest. These were living in a clump of earth at bottom of the nest, wet with excrementitious fluids, no larger than a double fist. The larvae were also taken. He also exhibited and reported taking the larvae of an interesting mosquito from a hole in a sycamore tree. The hole did not contain more than a quart of water and there were at least 1000 larvae living in it. The larvae are conspicuous for their large anal gills.

Mr. Grundel exhibited the pupae of Lemonias virgulti; Kodiosoma nigra ?; and a Geometrid.

Mr. Williams exhibited Attacus ceanothi that fed on the fir-tree; the larvae of Hepialus

sequivolus that fed on yellow lupine and Calosaturnia mendocino taken on manzanita.

Mr Edw. M. Ehrhorn exhibited a bunch of Earth-pearls (Margarodes tremeni) from South africa, which proved of great interest to the members especially the ladies. These scale insects are found on the roots of Rhus sp. in Cape Colony and are gathered by the natives who string them on threads and make them into bunches, and use them as ornaments around the neck or as bracelets.

The natives sell these bunches in the open market as curios. Each insect has the appearance of a beautiful pearl, and the colors vary from pure white through golden yellow to iridescent and en masse are very ornamental.

Then followed social discourse and refreshments, adjournment

T. E. Blaisdell, Sec.
1800 O'Farrell St.

REPORT of a TRIP ABROAD

by Julia Wright.

Mr. President and Members:

There are some of you present who know, I believe, that I have travelled a few thousands of miles since last June, and I have also seen a few thousands of beetles. I was away four months visiting England and Ireland.

Through the kindness of our Secretary and one or two other members, I was fortunate in having an introduction to the Curator or keeper as he is called, of the Entomological Department of the Museum in London, Kensington Museum as I afterwards found out and I wish to say that I very much appreciated it: so will try to tell you what I saw as I saw it. You know when one is travelling about from place to place visiting friends and relations we have not seen for about eleven years, the days are usually planned for us and naturally I wanted to see as much of the countries and interesting places as possible in a short time: so I did not spend as much time as I should have liked at Kensington.

However on July 21st, (it is as fresh in my memory as though it were yesterday) we went up to Waterloo, London, about an hour's ride in the train from Wimbledon where I was staying. We then took what is called the"sedond tube" : this is an electric railway which runs right under the Thames River and the City of London similar to that in New York. The trains of this railway are built after the American plan. At the Bank, we shanged to another underground line for the British Museum where I expected to see the beetles. Travelling and getting to a destination is as agreeable to me as being there. Well, I was very jubilant and inquired for the Curator but was told that the beetles were not there but at the Natural History Museum which is in a different district of London, namely Kensington, about an hour's ride on the 'bus.

REPORT of a TRIP ABROAD

by Julia Wright.

Mr. President and members:

There are some of you present who know I believe, that I have travelled a few thousands of miles during last three years. I have also seen a few thousands of beetles. I was away four months visiting Belgium and Ireland.

Through the kindness of our secretary and one of two other members, I was fortunate in having an introduction to the curator or keeper or he is called, of the Entomological Department of the Museum in London, Kensington Museum, as I afterwards found out and I shall be sorry that I very much appreciated his so will try to tell you what I saw as I saw it. You know when one is travelling about from place to place writing friends and relations we have been not seen for about eleven years, the days are usually planned for us and naturally I wanted to see as much of the country-side and interesting places as possible in a short time so I did not stand as much time as I should have liked at Kensington.

However on July 21st, (it is as fresh in my memory though it was yesterday) we went up to Victoria, London, about an hour's ride in the train from Middlesex where I was staying. We then took a hansom cab, the "Hansom" is a kind of an open carriage, which was right under the Tower Bridge, quite the city of London similar to that in New York. Some parts of this railway are built after the American plan. At the Bank, we changed to another underground line for the British Museum where I expected to see the beetles. Travelling and getting to a destination is as agreeable to me as point there. Well, I was very, without and thankful for the curator but was told that the beetles were not there but at the Natural History Museum which is in a different district of London, nearly Kensington, about an hour's ride on the bus.

So first we took a rather brisk walk through the British Museum spending the longest time with the mummies. I think there are some here who will agree with me that it is a rather trying thing to visit a Museum unless one has a specific object ot interest because there are so many many things to see that we hardly see anything.

We then climbed to the top of a bus for that's the best place and eventually arrived at the Natural History Museum. It is a beautiful magnificent building covering a large area of groung and at present great extensions are in the course of construction. I have brought snap shots of these two buoldings I took myself and hope some day you will all be able to visit them: they will do your eyes good to look upon, to say nothing of the efefct the beetles might have.

We entered this lovely place, again asked for the keeper: we were escorted by one of the porters wh stand inside the doors selling guides etc. through the different rooms, one of which is fitted u p for the younger students and the public that are interested in this subject, along a corridor, down some stone steps to the "Students' Department": a door was unlocked for us and we were directed to the office of Mr. Waterhouse who is the keeper. A cordial welcome was awaiting me as I had previously written to say when I was coming. I found Mr. Waterhouse a very enthusiastic entomologist and an exceedingly kind and congenial gentleman. After introducing ourselves, he proceeded to take us to the different rooms under the windows of which were students mounting various orders. He took down drawer after drawer of British coleoptera. Oh, they looked so neat! The specimens excepting perhaps the pargest, are mounted on cardboard with their legs and antennae all nicely speard out and stuck down: each drawer expressed patience and neatness. The pieces of cardboard on which the specimens are mounted are all the same shape, but vary of course in size according to the insects. You can get an idea of this from the box of British coleoptera that I brought with me this evening. Even the smallest of beetles are not mounted on triangles as we do. As Mr. Waterhouse had an engagement, he left us but first told us we might look at anything and everything we wished to and he unlocked several cases containing the drawers of beetles. There is also a fine collection of books, Towler being the authority on British coleoptera. We were unfortunate in not seeing the keeper again before leaving so

So later we took a rather brisk walk through the British Museum, comparing the treasures with the images. I think there are somewhere who will agree with me that it is a rather trying thing to visit a museum unless one has a specific object of interest, because there are so many things to see that we hardly see anything.

We then climbed to the top of a bus for this is the best place and eventually arrived at the Natural History Museum. It is a beautiful magnificent building covering a large area of ground and at present great extensions are in the course of construction. I have brought many photos of those two buildings I took several weeks ago, but you will also be able to see they will improve even good to look upon, so say nothing of the effect the beetles might have.

We entered this lovely place again asked for the keeper, we were escorted to one of the departments where stand inside the department building etc. through the different rooms, one of which is reached by a flight of the younger students and the public are interested in the insects, in the entomological department, down some stone steps to the "student's department" a door was unlocked for us and we were directed to the office of Mr. Waterhouse who is the keeper. A cordial welcome was awaiting me as I had previously written to say when I was coming. I found Mr. Waterhouse a very enthusiastic entomologist and an exceedingly kind and courteous gentleman. Later introducing ourselves, he proceeded to take us to the entomologist rooms under the "thews of which were exhibits mounting various orders. He took down drawer after drawer of British coleopters. Oh, they looked so neat! The specimens were mounted on white card, the drawers are lined with cork and all large and antennae all nicely spread out and stuck down; each drawer expressed patterns and measures. The pieces of cardboard on which the specimens are mounted are all the same shape, but very of course in size according to the insects. You can get an idea of this from the box of British coleopters that I brought with me this evening. Even the a-lint of beetles are not mounted on triangles as we do. As Mr. Waterhouse had an engagement he left us but first told us we might look at anything and everything we wished to and he unlocked several cases containing the drawers of beetles. There is also a fine collection of bugs, Tortoise being the authority on British coleopterra. We were unfortunate in not seeing the keeper again before leaving so

I left a little note for him and the beetles, a few common Californian ones I took over with us for exchange. He seemed very much pleased with them.

My second visit was in September. This time Mr. Waterhouse showed me the work he had been superintending in August which was the modelling of the larvae in wax from the living specimens. It was really wonderful and such beautiful, delicate work. I saw a model of the mosquito larva and it was about seven to nine inches long in correct proportion: even the little hairs on the segments had been counted and put on: not only was it modelled and perfect in every detail but it was also colored and I think he was exceedingly proud of it. On the whole, I had a most enjoyable visit. I think Mr. Waterhouse would be pleased to exchange if there are any who care to do so. I have a couple of letters from him. If you care to read them, you are perfectly welcome. Before leaving Mr. Waterhouse showed me a miscellaneous collection of Sir Joseph Banks, formerly in the collection of the Linnaean Society which is separately treasuered in the Museum. This collection was described by Fabricius about one hundred years ago and it still retains labels written by him.

LIFE HISTORY of LEMONIAS VIRGULTI.

by J. G. Grundel.

The female deposits its eggs on the stems and leaves of its food plant, a species of Eriogonum, near the ground: also on grasses and other weeds near by, singly and in groups of four and five. She doesn't seem able to fasten all the eggs as fully one half are dropped on the ground. The egg is a flattened globe of a bluish color with a shallow depression in the center and the whole is covered with small depressions very much like a thimble. The are not so deep in the micropyle and the edges of all are surrounded with lancet like projections. The egg is laid in August to September and the larva emerges the following February. The young larva feeds on the upper side of the leaves, but when half grown it feeds only on the outer bark of the stems and at night only, hiding during the day among the dead leaves and roots close to the stems. When full grown it is 7/8 inches long by 3/16 in diamter, color dark slate: abdomen red brown and legs, red. On each side, next to legs, ten yellow spots with tufts of short black hair, mixed with long white: the next rows have no spots but only short tukts of black hair shorter than in the first rows: the next rows have yellow spots with black hair and one white hair in center of each tuft. Head black, covered with short hair. The larva is a very small eater and acts similar to that of Chrysophanus gorgon. It fastens a number of dead leaves together with a very thin white web in which it rests when not eating and in which it also goes into chrysalis. The fly emerges in about one month and will feed only on the flowers of its food plant. The female pupa is as large again as the male and is covered with a thin down, the empty larval skin remaining on the anal end of the pupa. The fly is very plentiful and local in the Santa Cruz mountains and is to be found only on very hot roadsides.

GENERAL NOTES.

Last July while visiting a leighboring mountain, I saw thousands of larvae of D. lineata feeding on all kinds of grasses and herbs and I am very much afraid they will be a pest in our vineyards as they were about fourteen years ago.

Our San Jose scale that has been a pest in our orchards has all disappeared. The brown apricot scale is all gone, thanks to the little Comis fusca and the black scale on our olives is going fast, from what I don't know: perhaps the hot weather last summer has something to do with it.

NOTES on the LARVAE of certain LEPIDOPTERA.

by F. X. WILLIAMS.

SPINX SEQUOIAE, Shasta Co., Cala. Larva hatches from large pale green egg, oval and eliptically flattened, laid usually singly on the underside of leaf of Cerasus sp. (wild cherry). Full grown larva about two inches long, sea green in color, head triangular and greenish as in Smerinthus. Body very rough and granular: anal horn green, straight and rather short. The lateral oblique lines are scarlet and spots of the same color are scattered sparsely over the body, their number and distinctness different in different individuals. The larva much resembles a smerinthus caterpillar and the pupa resembles the pupa of the latter, being stout reddish brown in color and having no protruding tongue case.

Larva and eggs of X. PERELEGANS were found on manzanita.

CALOSATURNIA MENDOCINO, Behr, Eggs laid from one to about ten on leaf of Manzanita: many eggs parasitized. Full grown larvae of two colors, one a beautiful green, the other a rich reddish brown. The larva is armed with bristles which sting painfully. The cocoon is hidden cunningly. It is sometimes spun between leaves but more often at the base of the trunk of the manzanita, which is covered with their curling bark. The cocoon is spun closely compressed to the trunk and covered with the curling bark in imitation of its surroundings. The is rather difficult to rear.

Larvae of PAPILIO DAUNUS were observed feeding on the Oregon ash.

A very dark ATTACUS was reared from a caterpillar feeding on spruce (Shasta Co.) Larvae were also taken on manzanita and willow.

I have taken what I believe to be the larva of HEPIALUS SEQUOIOLUS, Behrens. I took several in November feeding in the decumbent stems of yellow lupine and in the ~~tid~~ thicker roots. The larvae resembles the hepialidae larvae having large dorsal plates of different sizes on the first four segments.